Service Document
Exchange Set

RRCD 3400 MP3

Service Manual

Sicherheit
Safety

Materialnr./Part No.
720108000001

⚠ Es gelten die Vorschriften und Sicherheitshinweise gemäß dem Service Manual "Sicherheit", Materialnummer 720108000001, sowie zusätzlich die eventuell abweichenden, landesspezifischen Vorschriften!

⚠ The regulations and safety instructions shall be valid as provided by the "Safety" Service Manual, part number 720108000001, as well as the respective national deviations.

Dieses Service Dokument ist nur in Datenform verfügbar
This Service Document is only available as data

Änderungen vorbehalten/Subject to alteration

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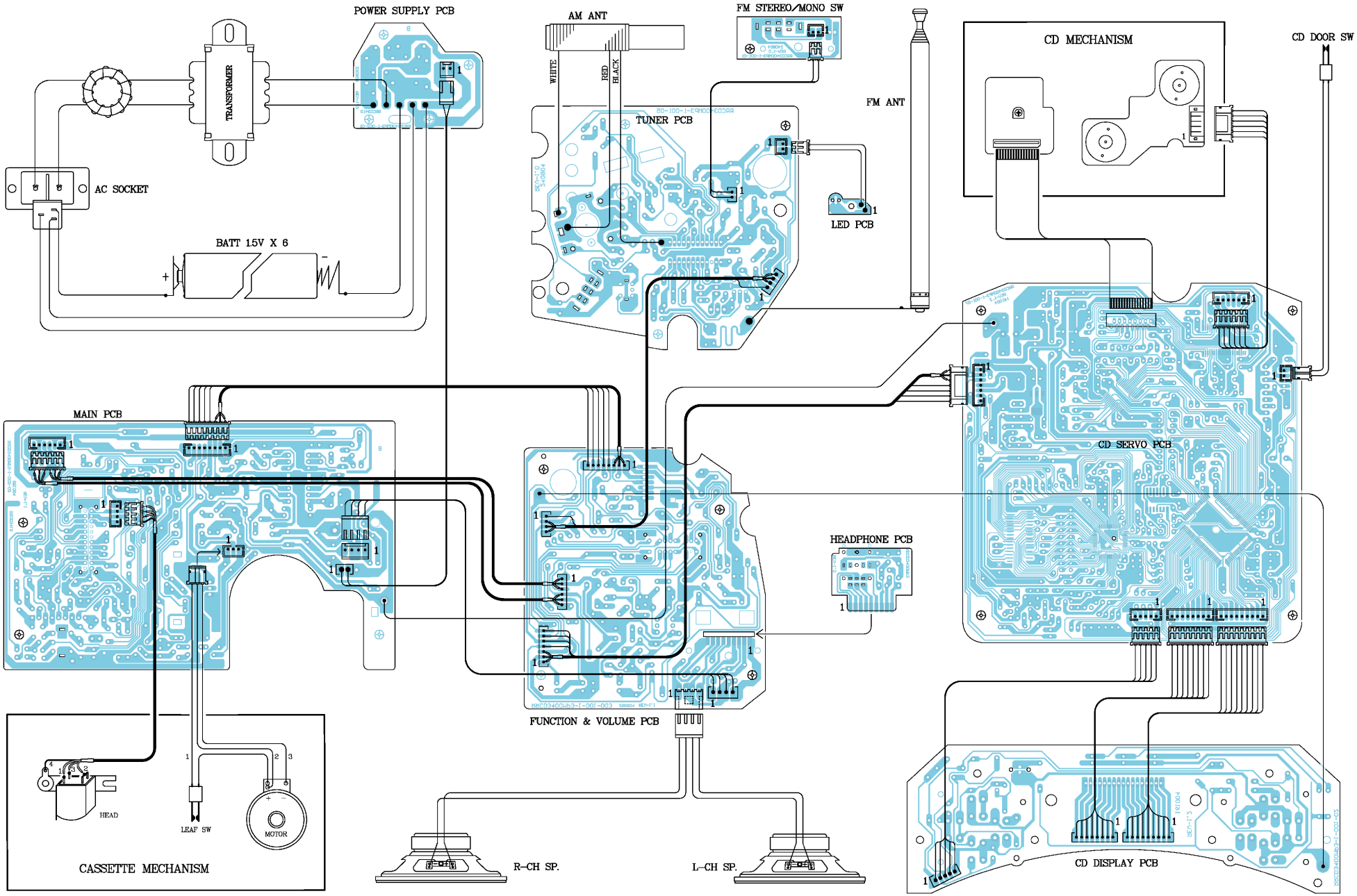
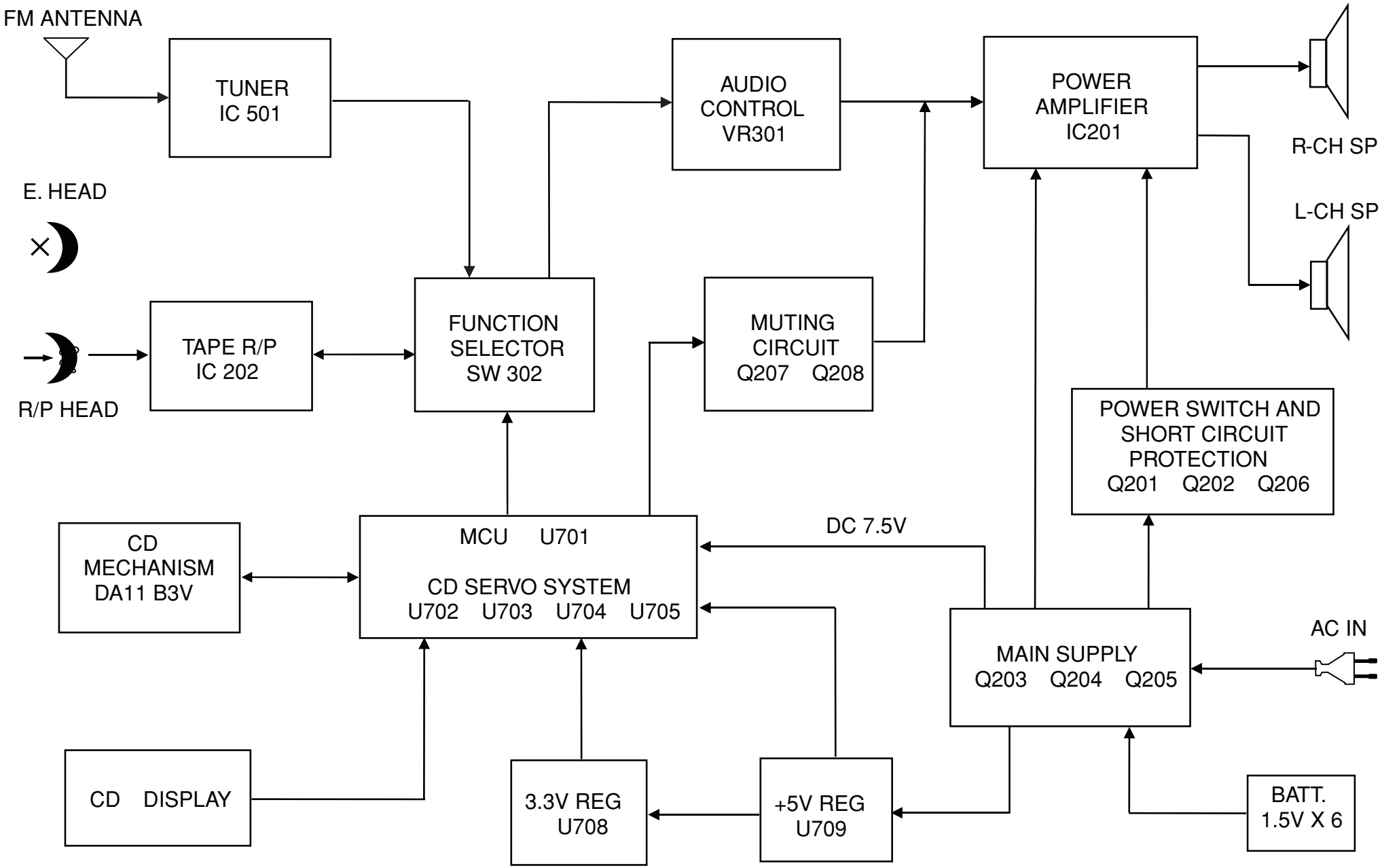
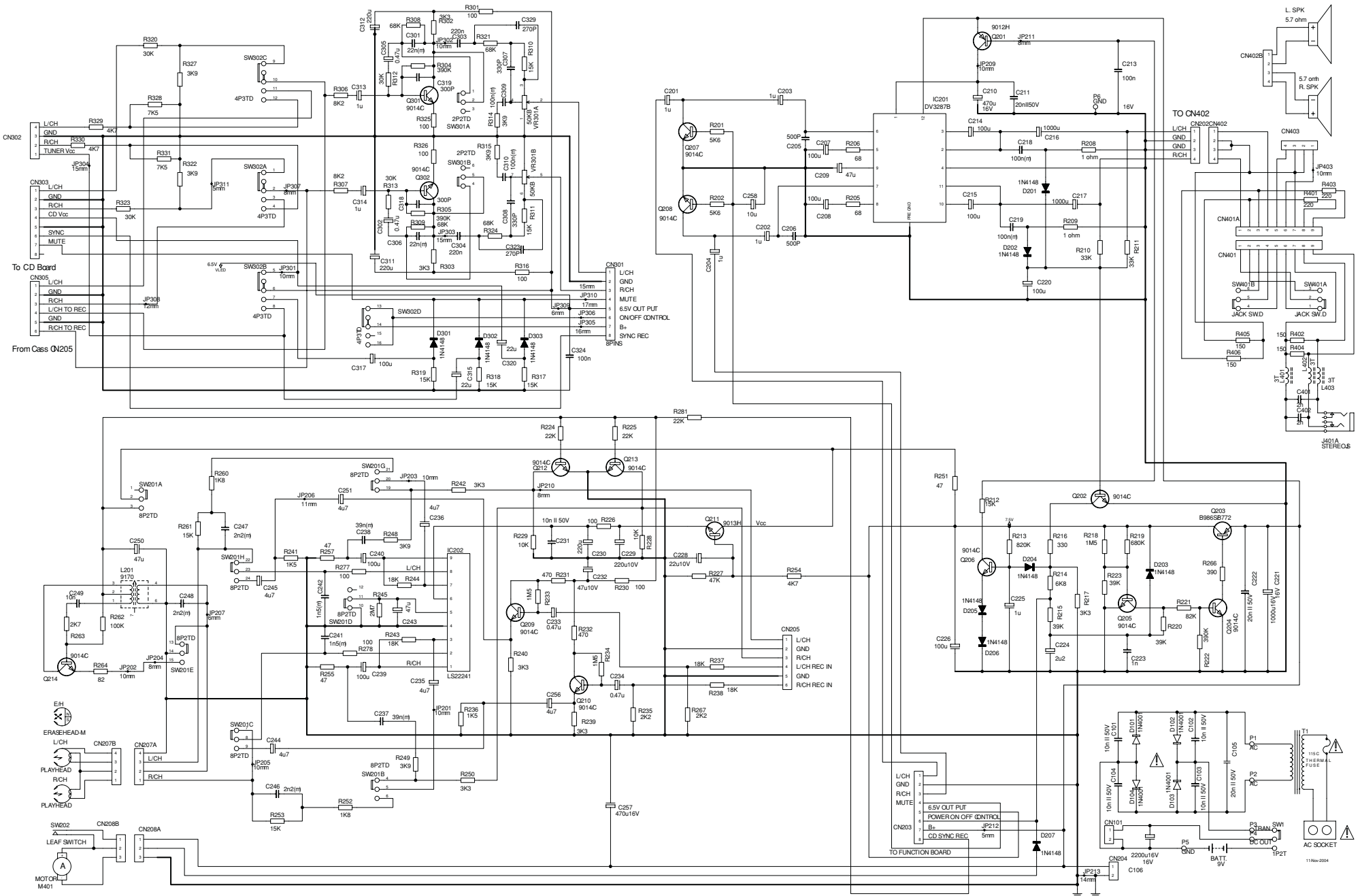
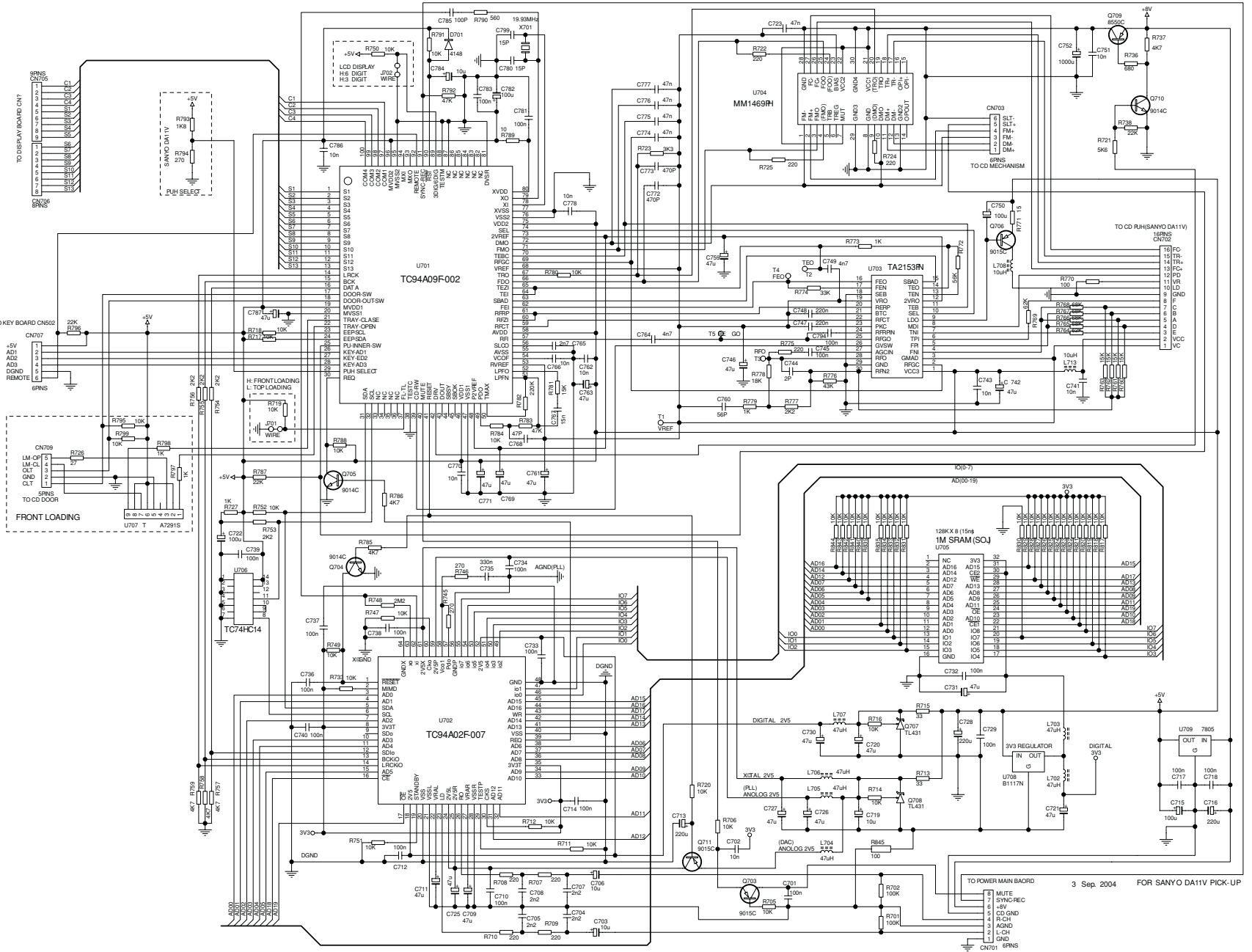

POWER SUPPLY PCB
TRANSFORMER
AC SOCKET
BATT 1.5V X 6
AM ANT
WHITE
RED
BLACK
FM STEREO/MONO SW
TUNER PCB
FM ANT
LED PCB
CD MECHANISM
CD DOOR SW
MAIN PCB
CD SERVO PCB
HEADPHONE PCB
FUNCTION & VOLUME PCB
HEAD
LEAF SW
MOTOR
CASSETTE MECHANISM
R-CH SP.
L-CH SP.
CD DISPLAY PCB


FM ANTENNA
TUNER
IC 501
AUDIO
CONTROL
VR301
POWER
AMPLIFIER
IC201
R-CH SP
L-CH SP
E. HEAD
TAPE R/P
IC 202
R/P HEAD
FUNCTION
SELECTOR
SW 302
MUTING
CIRCUIT
Q207 Q208
POWER SWITCH AND
SHORT CIRCUIT
PROTECTION
Q201 Q202 Q206
CD
MECHANISM
DA11 B3V
MCU U701
CD SERVO SYSTEM
U702 U703 U704 U705
DC 7.5V
AC IN
MAIN SUPPLY
Q203 Q204 Q205
CD DISPLAY
3.3V REG
U708
+5V REG
U709
BATT.
1.5V X 6



GRUNDIG

RRCD 3400 MP3



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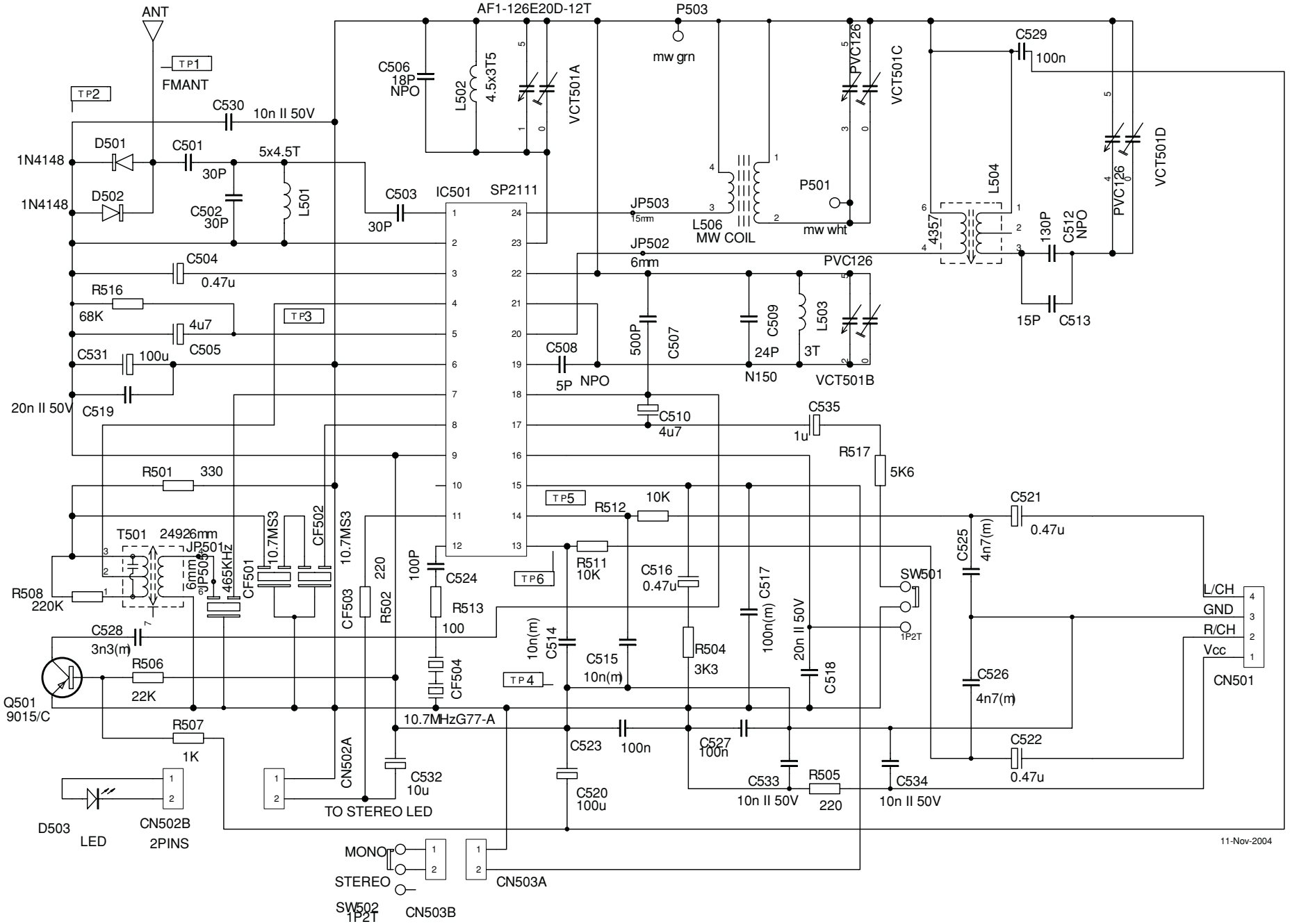
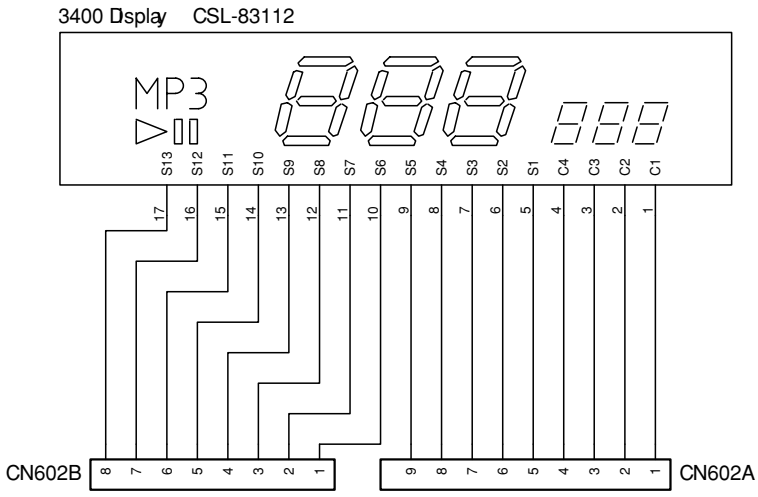
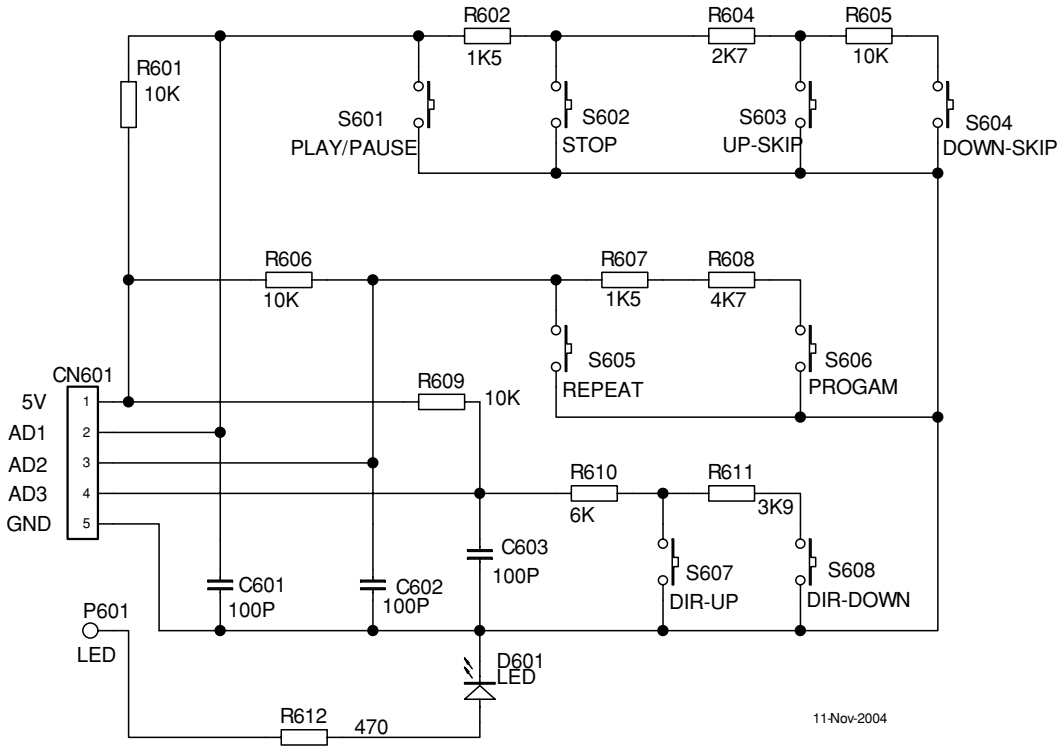
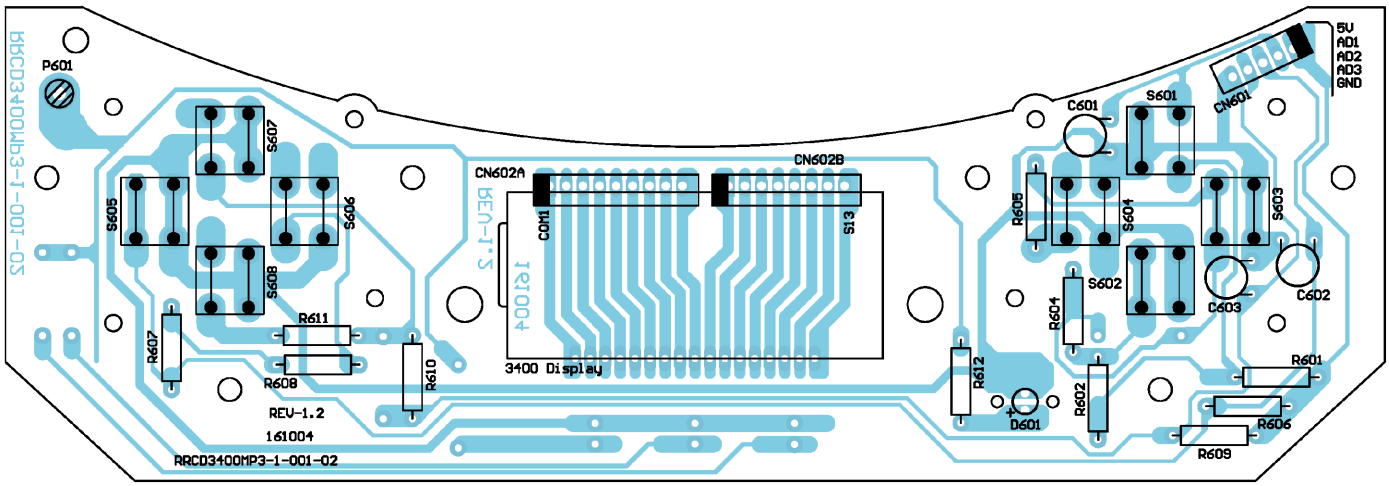
RRCD 3400 MP3


ANT
TP1
FMANT
TP2
C530
10n II 50V
D501
1N4148
D502
1N4148
C501
30P
C502
30P
5x4.5T
L501
C503
30P
IC501
SP2111
AF1-126E20D-12T
C506
18P
NPO
L502
4.5x3T5
VCT501A
P503
mw grn
JP503
15mm
L506
MW COIL
P501
mw wht
PVC126
VCT501C
C529
100n
L504
4357
130P
C512
NPO
15P
C513
PVC126
VCT501D
JP502
6mm
PVC126
C504
0.47u
R516
68K
4u7
C505
TP3
C531
100u
C519
20n II 50V
C508
5P
NPO
500P
C507
C509
24P
N150
L503
3T
VCT501B
C510
4u7
C535
1u
R517
5K6
R501
330
TP5
R512
10K
C521
0.47u
C525
4n7(m)
T501
24926mm
JP501
6mm
JP502
465KHz
CF501
10.7MS3
CF502
10.7MS3
CF503
220
R502
100P
C524
R513
100
TP6
R511
10K
C516
0.47u
C517
100n(m)
20n II 50V
C518
SW501
1P2T
L/CH
GND
R/CH
Vcc
CN501
R508
220K
C528
3n3(m)
R506
22K
Q501
9015/C
C514
10n(m)
C515
10n(m)
R504
3K3
TP4
CF504
10.7MHzG77-A
C526
4n7(m)
R507
1K
C523
100n
C527
100n
C522
0.47u
C532
10u
C520
100u
C533
10n II 50V
R505
220
C534
10n II 50V
CN502A
TO STEREO LED
D503
LED
CN502B
2PINS
MONO
STEREO
SW502
1P2T
CN503B
CN503A
11-Nov-2004


3400 Display CSL-83112
MP3
S13 S12 S11 S10 S9 S8 S7 S6 S5 S4 S3 S2 S1 C4 C3 C2 C1
17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1
CN602B
8 7 6 5 4 3 2 1
9 8 7 6 5 4 3 2 1
CN602A


R602 1K5
R604 2K7
R605 10K
R601 10K
S601 PLAY/PAUSE
S602 STOP
S603 UP-SKIP
S604 DOWN-SKIP
R606 10K
R607 1K5
R608 4K7
S605 REPEAT
S606 PROGAM
CN601
5V
AD1
AD2
AD3
GND
R609 10K
R610 6K
R611 3K9
C603 100P
C601 100P
C602 100P
S607 DIR-UP
S608 DIR-DOWN
P601 LED
D601 LED
R612 470
11-Nov-2004


RRCD3400MP3-1-001-02
P601
S607
S605
S606
S608
R611
R607
R608
R610
CN602A
CN602B
COM1
S13
REV-1.2
3400 Display
REV-1.2
161004
RRCD3400MP3-1-001-02
C601
S601
CN601
5V
AD1
AD2
AD3
GND
R605
S604
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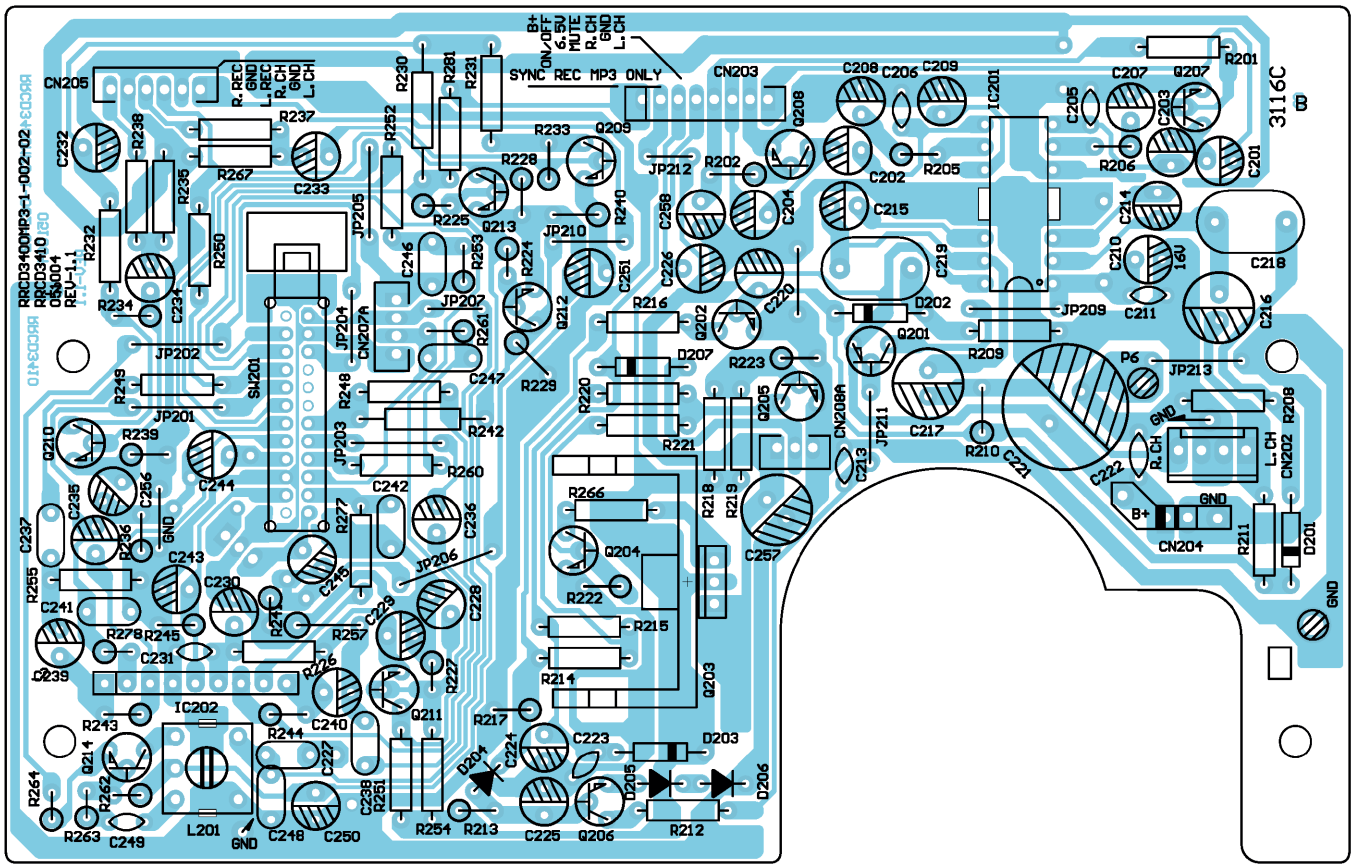
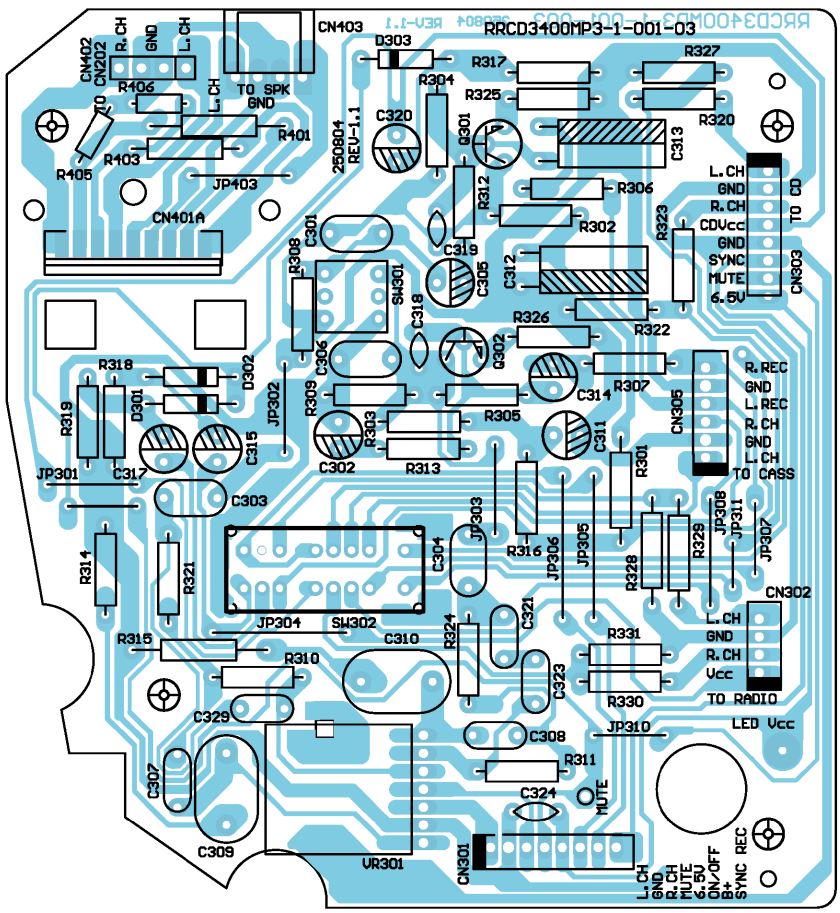
D601
R602
R601
R606
R609


SYNC REC MP3 ONLY
3116C
B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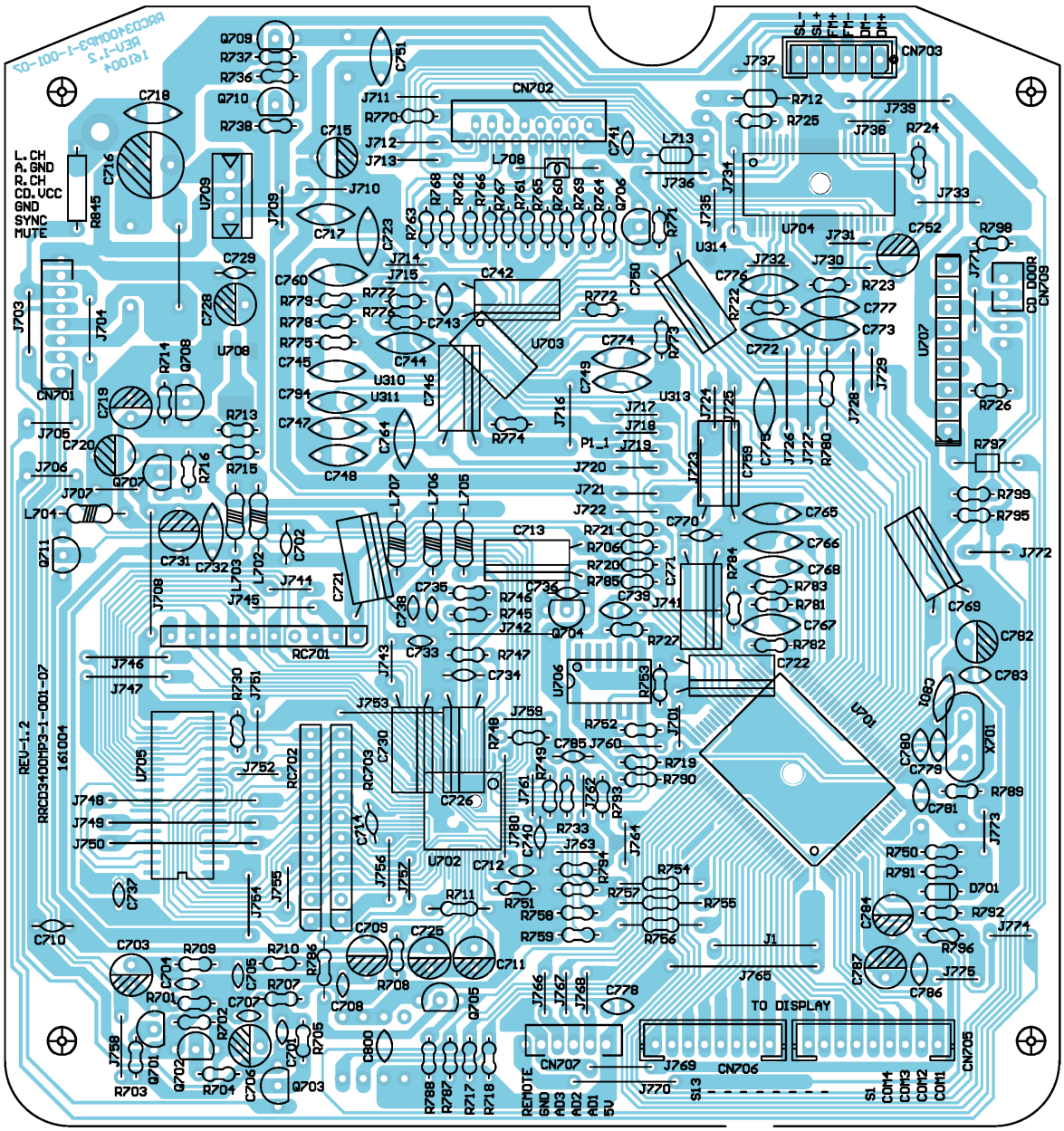
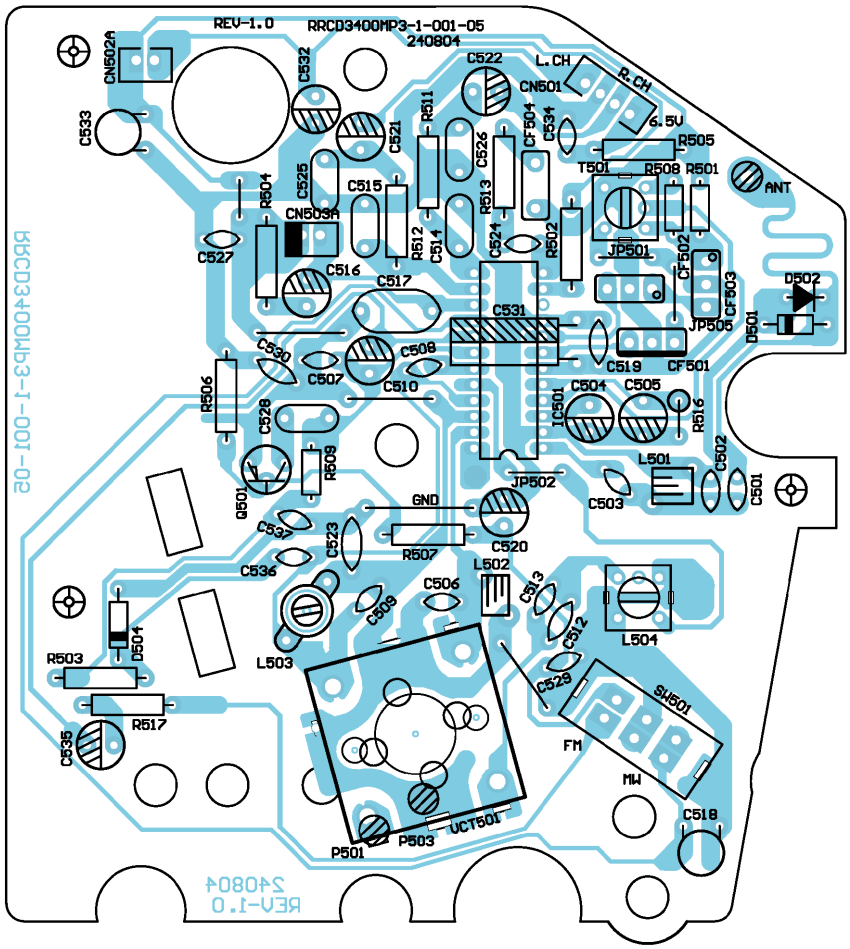
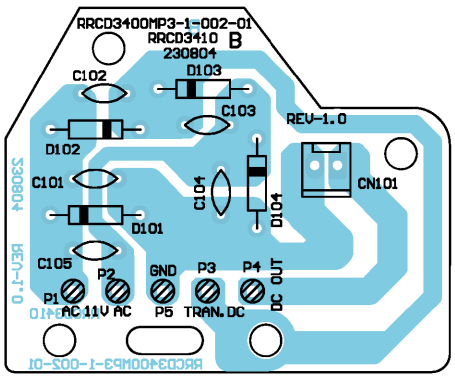
TO SPK
TO CD
TO CASS
TO RADIO
LED Vcc


L.CH
P.GND
R.CH
CD.VCC
GND
SYNC
MUTE
REV-1.2
RRCD3400MP3-1-001-07
161004
TO DISPLAY
CD DOOR
REMOTE
GND
AD3
AD2
AD1
5V
COM4
COM3
COM2
COM1


REV-1.0
RRCD3400MP3-1-001-05
240804
CN502A
C532
C533
C522
L.CH
R.CH
CN501
6.5V
R505
T501
R508
R501
ANT
C521
R511
C526
CF504
C534
C525
R504
C515
R513
C524
R502
JP501
CF502
CF503
D502
D501
JP505
CN503A
C527
C516
R512
C514
C517
C531
C519
CF501
C530
C508
C507
C510
C504
C505
R516
IC501
R506
C528
R509
Q501
C502
L501
C501
JP502
C503
GND
C533
C523
C520
R507
C536
L502
C513
C506
C509
C512
L504
R503
D504
L503
C529
SW501
FM
MW
R517
C535
C518
P501
P503
UCT501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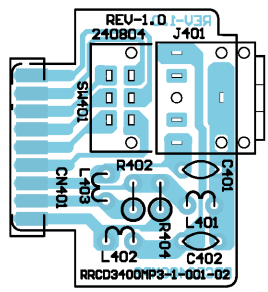
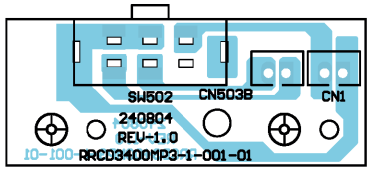
RRCD3410 B
230804
C102
D103
C103
REV-1.0
D102
C101
C104
D104
CN101
D101
C105
P2
GND
P3
P4
P1
AC 11V AC
P5
TRAN. DC
DC OUT


REV-1.0
240804
J401
SW401
R402
CN401
C403
C401
L401
R401
L402
C402
RRCD3400MP3-1-001-02


SW502
CN503B
CN1
240804
REV-1.0
RRCD3400MP3-1-001-01

LED501

ALIGNMENT PROCEDURE

GRUNDIG RRCD3400MP3

INSTRUMENTS REQUIRED

1. Signal Generator
2. FM Signal Generator
3. FM/AM IF Sweep Generator (10.7 MHz for FM)
4. VTVM
5. Oscilloscope
6. Frequency counter
7. Regulated DC power supply

GENERAL PREPARATION

1. Check source voltage, DC or AC according to specificaions
2. Set function switch to band being aligned
3. Signal input should be kept as low as possible to avoid AGC and AFC function
4. Standard modulation : AM 1 KHz 30% mod
   FM 1 KHz 22.5 KHz dev

AM IF ALIGNMENT

STEP	SIGNAL SOURCE (AM RF Gen.) CONNECT TO	SET SIGNAL TO	ALIGNMENT INDICATOR (Oscilloscope, VTVM) CONNECT TO	SET RADIO DIAL TO	ADJUST	ADJUST FOR	REMARKS
1	A standard radiation loop	465KHz	TP5 OR TP6 Detector output terminal and TP4 ground	Quiet Point	T501	Maximum	Volume control at min. position
2	Repeat step 1 for max. output						

FM IF ALIGNMENT

This model requires no FM IF alignment as the IF is fixed by ceramic filter and discriminator CF51,CF502. Please take note that correct type and same color dot of ceramic filter is used in servicing, diff color dot of ceramic filter may cause worse IF 'S' curve characteristic and distortion.

Connect IF genescope output terminal to TP3 & TP4 (GND) in series with a 1000Pf capacitor, connect scope input terminal to TP5 or TP6 & TP4 (GND), then the IF characteristic curve can be observed.

FM RF ALIGNMENT

STEP	SIGNAL SOURCE (FM Signal Gen.) CONNECT TO	SET SIGNAL TO	ALIGNMENT INDICATOR (Oscilloscope, VTVM) CONNECT TO	SET RADIO DIAL TO	ADJUST	ADJUST FOR	REMARKS
1	TP1 & TP2 through matching network if necessary	87.35 MHz (modulated)	Terminals across speaker voice coil	(Lowest end)	L503 (Osc. coil) stretch or squeeze	Maximum	Volume control at max. position
2		108.25 MHz (modulated)		(Highest end)	VCT 501B (Osc. trimmer)		
3		88 MHz (modulated)		88 MHz	L502 (RF coil) stretch or squeeze		
4		106 MHz (modulated)		106 MHz	VCT 501A (RF trimmer)		
5	Repeat steps 3 and 4 as necessary to minimize tracking error and also steps 1 and 2 if necessary						

FM MPX ALIGNMENT (NA)

SIGNAL SOURCE	SET SIGNAL TO	ALIGNMENT INDICATOR (Frequency Counter) CONNECT TO	SET RADIO DIAL TO	ADJUST	ADJUST FOR	REMARKS

AM RF ALIGNMENT

STEP	SIGNAL SOURCE (AM Signal Gen.) CONNECT TO	SET SIGNAL TO	ALIGNMENT INDICATOR (Oscilloscope, VTVM) CONNECT TO	SET RADIO DIAL TO	ADJUST	ADJUST FOR	REMARKS
1	A standard radiation loop ant.	515 KHz (modulated)	Across speaker voice coil	(Lowest end)	L 504 (Osc. coil)	Maximum	Volume control at max. position
2		1630 KHz (modulated)		(Highest end)	VCT 501D (Osc. trimmer)		
3		558 KHz (modulated)		558 KHz	L506 (ant. coil)		
4		1440 KHz (modulated)		1440 KHz	VCT 501C (ant. trimmer)		
5	Repeat steps 3 and 4 as necessary to minimize tracking error and also steps 1 and 2 if necessary						

LW RF ALIGNMENT (NA)

STEP	SIGNAL SOURCE (LW Signal Gen.) CONNECT TO	SET SIGNAL TO	ALIGNMENT INDICATOR (Oscilloscope, VTVM) CONNECT TO	SET RADIO DIAL TO	ADJUST	ADJUST FOR	REMARKS
1	A standard radiation loop ant.	(modulated)	across speaker voice coil	(Lowest end)		Maximum	Volume control at max. position
2		(modulated)		(Highest end)	(Osc. trimmer)		
3		(modulated)			(ant. coil)		
4		(modulated)			(ant. trimmer)		
5	Repeat steps 3 and 4 as necessary to minimize tracking error and also steps 1 and 2 if necessary						

ALIGNMENT PROCEDURE FOR CD SECTION

Applicable unit :

1 This model is using CD drive unit No. SANYO DA11B3V

2 The alignment for CD section is fully automatic and no adjustment is reguired

GENERAL PREPARATION - 1) Check source voltage, DC or AC according to specifications . 2) Set function switch to Tape being aligned .

A) MEASURING INSTRUMENTS REQUIRED FOR TAPE SPEED AND HEAD AZIMUTH ADJUSTMENT.

(1) TAPE SPEED ADJUST

MTT-111N (3000 Hz) TEST ◦

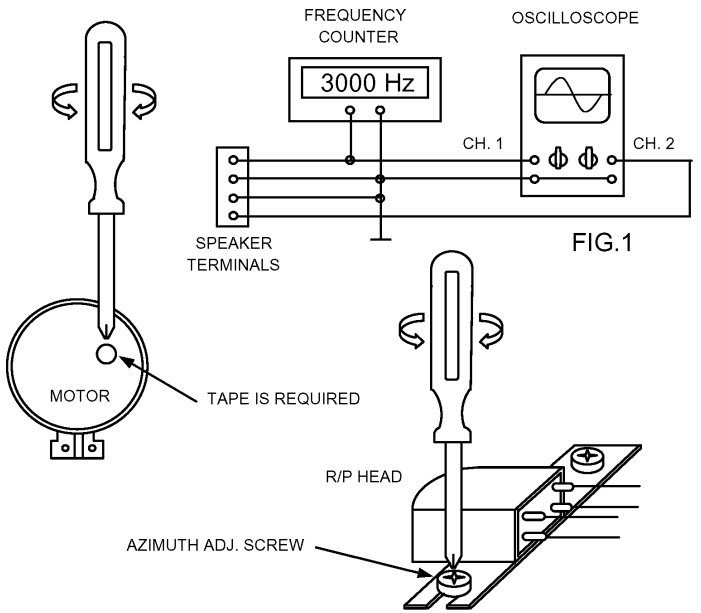


FIG.1

(2) HEAD AZIMUTH ADJUSTMENT .

2.1 - Connect the equipments as shown in the Fig. 1. (The Both Speakers loading Are Required)
2.2 - Insert a test tape (10 KHz : MTT-114) into deck.
2.3 - Press PLAY and set VOLUME at reference output.
2.4 - Adjust the azimuth adjustment screw for the max. & balance ch. output on both ch. of oscilloscope.
2.5 - Secure above screw with glue after adj. completed.

B) EQUIPMENTS REQUESTED FOR AC BIAS FREQUENCY / CURRENT ADJUSTMENT :

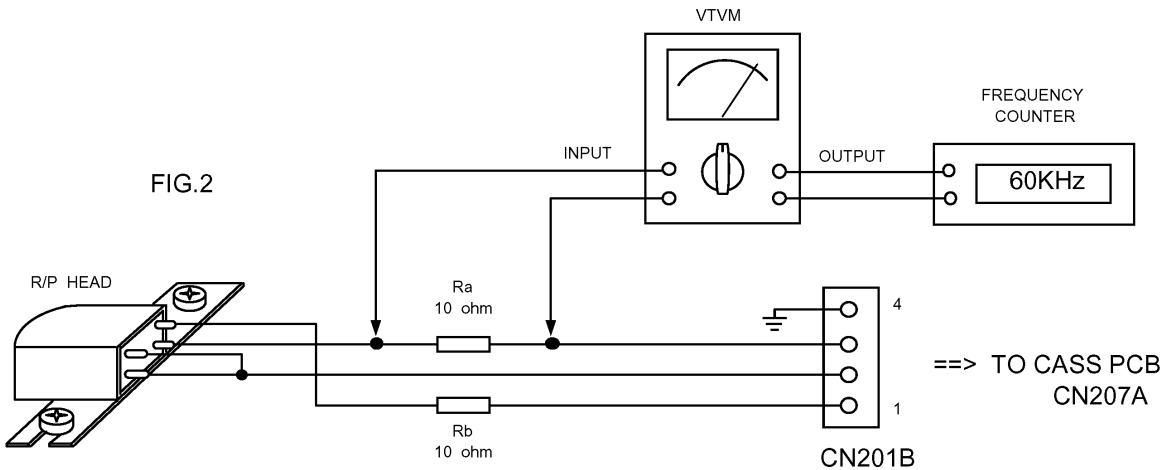
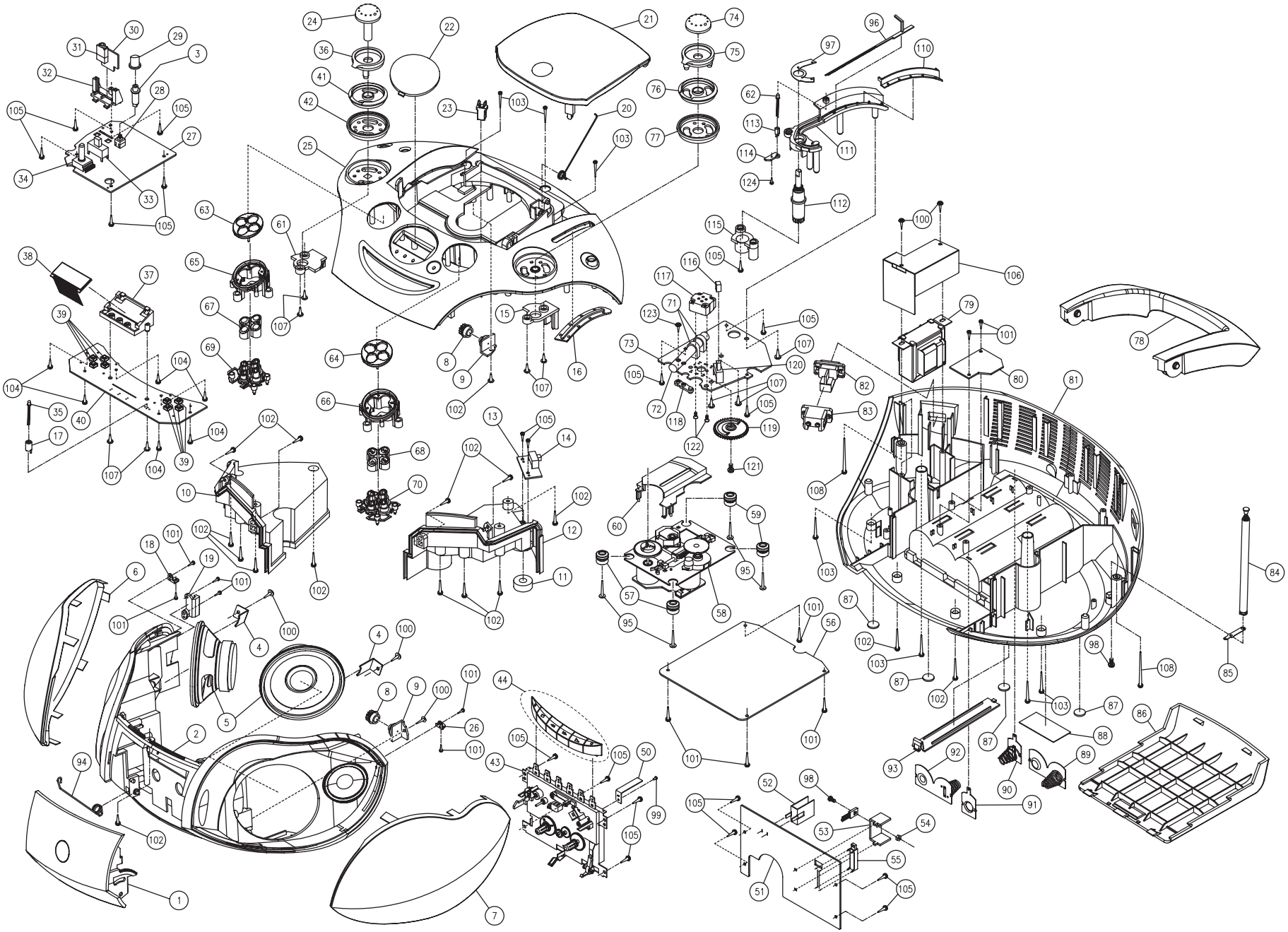


FIG.2

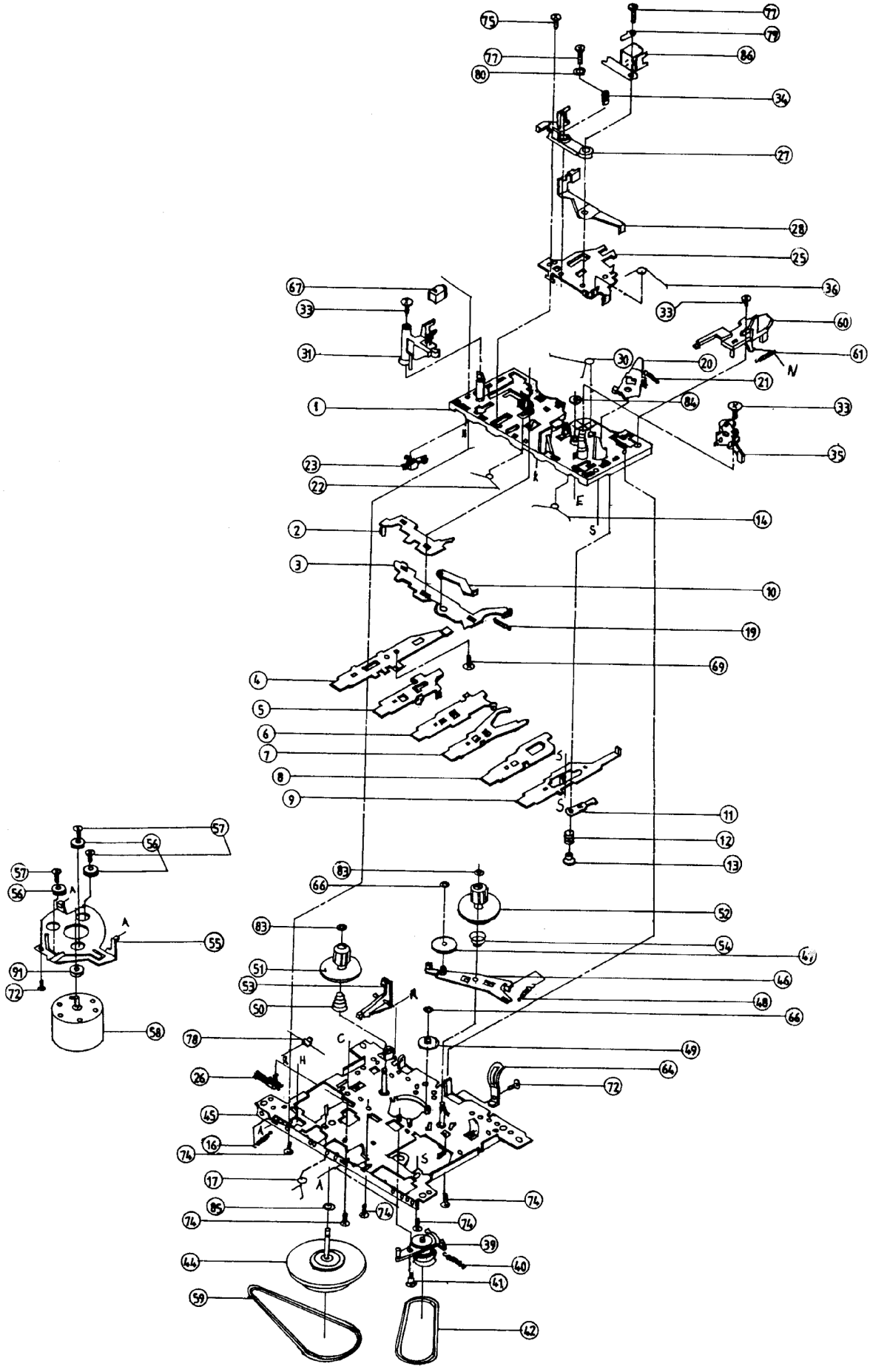
AC BIAS FREQUENCY ALIGNMENT :

Note :The test unit should be keep in recording mode and added two resistors Ra & Rb as shown in the Fig. 2 before alignment. be sure to delete the both resistors Ra & Rb after alignment completed.

Test Point	Adjust	Frequency at Beat 0	Frequency Observe at		Observe		
			Beat 1	Beat 2	Beat 0	Beat 1	Beat 2
Resistor Ra or Rb	L201	60 KHz ± 1K					

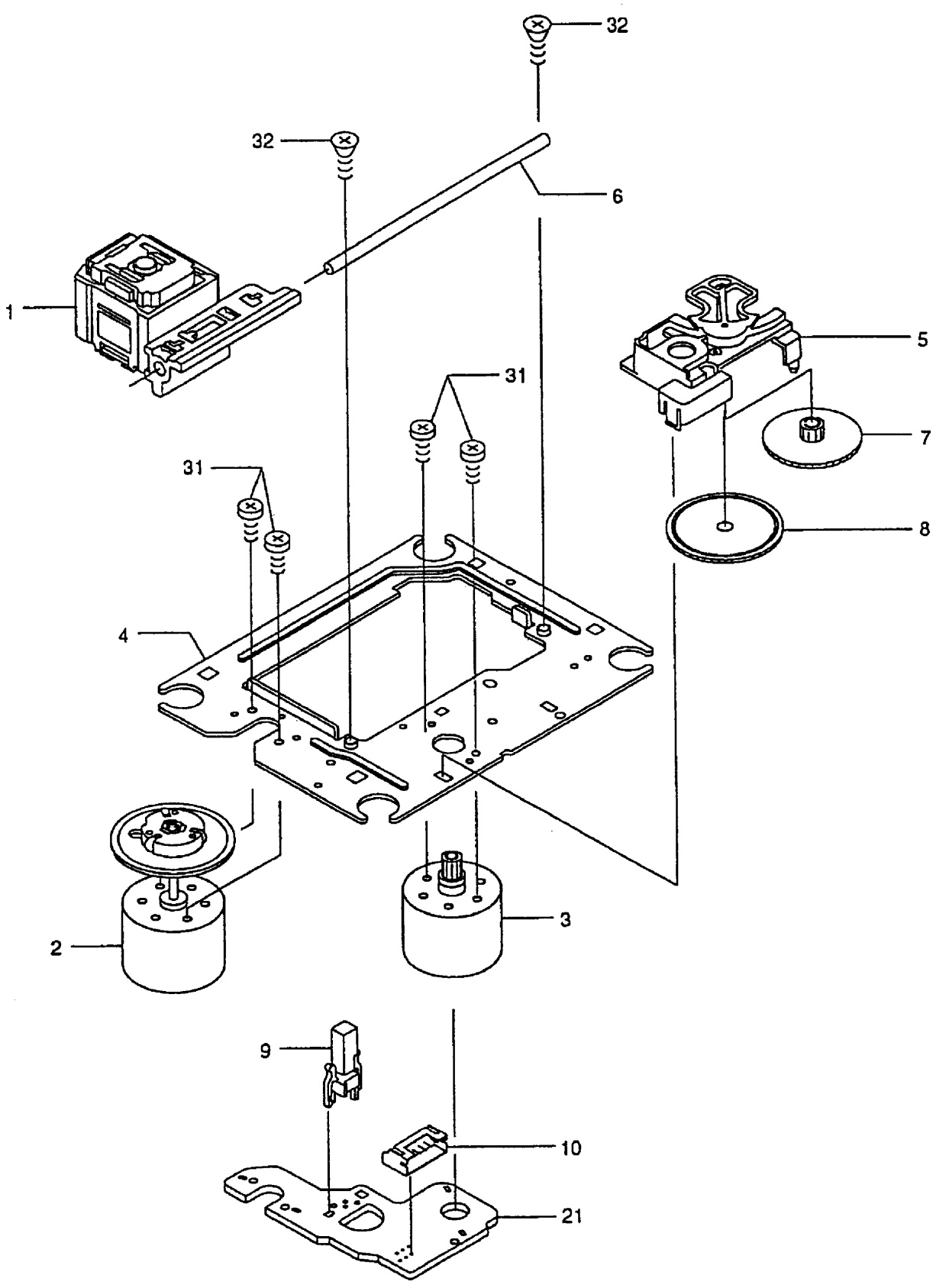


CS-21V



SANYO DA11B3V

CD PLAYER MECHANISM EXPLODED VIEW



GRUNDIG

Ersatzteilliste
Spare Parts List

NUR FÜR INTERNEN GEBRAUCH
FOR INTERNAL USE ONLY

AUDIO

11 / 2004

RRCD 3400 MP 3

MATERIAL-NR. / PART NO.: 757123425000
BESTELL-NR. / ORDER NO.: GDP5400

POS. NR. POS. NO.	ABB. FIG.	MATERIAL-NR. PART NUMBER	ANZ. QTY.	BEZEICHNUNG (D)	DESCRIPTION (GB)
		757123425000		RRCD 3400 MP3 CHROM **TAUSCHGERAET**	RRCD 3400 MP3 CHROME **EXCHANGE SET**
0001.000		759551089300		DECKEL CASS.	CASS. DOOR
0020.000		759551089200		FEDER CD TUER	CD DOOR SPRING
0021.000		759551089500		DECKEL CD	CD DOOR
0043.000		759551088900		LAUFWERK CASS. THL-21VB-1933A	CASS. MECHANISM THL-21VB-1933
0044.000		759551089800		TASTENSATZ CASS. KPL.	CASSETTE KNOB (SET)
0058.000	⚠	759550615100		LAUFWERK CD DA11-T3CN	CD MECHANISM DA11-T3CN
0078.000		759551089400		TRAGEGRIFF	HANDLE
0084.000		759551089000		TELESKOPANTENNE TA78124	FM ROD ANTENNA TA78124
0086.000		759551089700		TUERE BATTERIEFACH	BATTERY DOOR
0093.000		759551089600		BATTERIEFACHABDECKUNG	BATTERY COVER
0094.000		759551089100		FEDER CASS. TUER	CASS. DOOR SPRING
0100.000	⚠	759525012400		NETZKABEL	POWER CORD
		720114049000		BEDIENUNGSANLEITUNG D/GB/F/I/P/E/NL/PL/DK/S/FIN	INSTRUCTION MANUAL D/GB/F/I/P/E/NL/PL/DK/S/FIN

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ÄNDERUNGEN VORBEHALTEN / SUBJECT TO ALTERATION